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APPL. NO.: 10/590,167

DOCKET NO.: HGX-003.01

## In the claims:

1. (**currently amended**) A process for preparing a lithium amide composition, comprising the steps of: (1) contacting lithium metal with ammonia to form lithium bronze; and (2) reacting the lithium bronze with a 1,3-diene or an arylolefin in the presence of a solvent, thereby providing a lithium amide composition; wherein the temperature is maintained <u>between -33 and -78 °C</u> at or below the boiling point of ammonia.

- 2. (**previously presented**) The process of claim 1, wherein the lithium metal is brought into contact with the ammonia by charging the ammonia to the lithium metal.
- 3. (**previously presented**) The process of claim 1, wherein the 1,3-diene or arylolefin is butadiene, isoprene, piperylene, dimethylbutadiene, hexadiene, styrene, methyl styrene, divinylbenzene, naphthalene or anthracene.
- 4. **(previously presented)** The process of claim 1, wherein the 1,3-diene or arylolefin is styrene, methyl styrene or divinylbenzene.
- 5. (**previously presented**) The process of claim 1, wherein the solvent is pentane, cyclopentane, hexane, heptane, octane, cyclohexane, toluene, xylene, cumene, ethyl benzene, tetralin, diethyl ether, tetrahydrofuran (THF), 2-methyl-THF, tetrahydropyran, diisopropyl ether, dibutyl ether, dioxan, methyl-tert-butyl ether or glycol ether.
- 6. (**previously presented**) The process of claim 1, wherein the lithium metal is contacted with four to five molar equivalents of anhydrous ammonia.
- 7. (canceled)
- 8. (**previously presented**) The process of claim 1, further comprising the step of removing excess ammonia by distillation at reduced pressure at a temperature between -33 and -78  $^{\circ}$ C; wherein the lithium amide composition has a molar ratio of lithium amide to ammonia greater than 1 : 0.5 (LiNH<sub>2</sub> : NH<sub>3</sub>).
- 9. (**previously presented**) A lithium amide composition prepared by the process of claim 1.

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10. (**previously presented**) The process of claim 1, wherein the temperature of both steps is maintained between -35 and -65 °C.

- 11. (**previously presented**) The process of claim 1, wherein the temperature of both steps is maintained at -40 °C.
- 12. **(previously presented)** The process of claim 1, further comprising the step of removing excess ammonia by distillation at reduced pressure at a temperature between -33 and -78 °C; wherein the lithium amide composition has a molar ratio of lithium amide to ammonia greater than 1 : 1 (LiNH<sub>2</sub> : NH<sub>3</sub>).
- 13. (**previously presented**) The process of claim 3, wherein the solvent is pentane, cyclopentane, hexane, heptane, octane, cyclohexane, toluene, xylene, cumene, ethyl benzene, tetralin, diethyl ether, tetrahydrofuran (THF), 2-methyl-THF, tetrahydropyran, diisopropyl ether, dibutyl ether, dioxan, methyl-tert-butyl ether or glycol ether.
- 14. (**previously presented**) The process of claim 4, wherein the solvent is pentane, cyclopentane, hexane, heptane, octane, cyclohexane, toluene, xylene, cumene, ethyl benzene, tetralin, diethyl ether, tetrahydrofuran (THF), 2-methyl-THF, tetrahydropyran, diisopropyl ether, dibutyl ether, dioxan, methyl-tert-butyl ether or glycol ether.

## Claims 15-18 (canceled)

- 19. (**previously presented**) The lithium amide composition of claim 9, wherein the lithium amide composition has a molar ratio of lithium amide to ammonia greater than 1 : 0.5 (LiNH<sub>2</sub> : NH<sub>3</sub>).
- 20. (**previously presented**) The lithium amide composition of claim 9, wherein the lithium amide composition has a molar ratio of lithium amide to ammonia greater than 1 : 1 (LiNH<sub>2</sub> : NH<sub>3</sub>).

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